The Kentucky Colon Cancer Screening Advisory Committee Annual Report July 2012 through June 2013

This report was prepared by

The Kentucky Department for Public Health
Division of Prevention and Quality Improvement
Chronic Disease Prevention Branch in Collaboration with
The Kentucky Colon Cancer Screening Advisory Committee

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Message from the Kentucky Colon Cancer Screening Advisory Committee

In 2008, the Kentucky General Assembly enacted House Bill 415 which provided for the establishment of a statewide colon cancer screening program. According to the legislation, the Kentucky Colon Cancer Screening Program (KCCSP) was established for three purposes:

- 1) Increasing colon cancer screening;
- 2) Reducing morbidity and mortality from colon cancer; and
- 3) Reducing the cost of treating colon cancer among citizens of the Commonwealth.

Colon cancer is a significant health problem in Kentucky - it is the second leading cause of cancer death for men and women combined. Despite our successes over the years in raising our screening rates, over 30% of Kentuckians are still not screened for colon cancer according to the guidelines. Many colon cancers can be prevented by removing polyps before they develop into cancer.

As part of KRS 214.544, a Kentucky Colon Cancer Screening Advisory Committee (KCCSAC) was assembled to provide recommendations for the overall implementation and conduct of the Kentucky Colon Cancer Screening Program. Currently, over 20 representatives from organizations addressing colon cancer and screening activities provide consultation and oversight for the public awareness program as well as offering indirect support to the development of the program.

Efforts to move forward on the three purposes of the screening program are incremental and can only be accomplished in partnership with others. Members of the advisory committee continue to develop innovative and grassroots projects to address colon cancer screening in our state. In the 2010 Special Session, the General Assembly allocated \$200,000 from coal severance funds to support colon cancer prevention and screening efforts in four counties: Floyd, Letcher, Martin, and Pike. In the 2012 Legislative Session, \$170,000 was allocated from coal severance funds for Floyd, Knott, and Pike Counties. In addition, during the 2012 Legislative Session Governor Beshear allocated \$1,000,000 for the biennium to address colon cancer screening of the uninsured which was to be matched by \$1,000,000 from the Kentucky Cancer Foundation.

The coalition of partners comprising the advisory committee continue to move forward in their collaborative efforts to reduce the high rates of colon cancer incidence and mortality in Kentucky - through screening, early detection, and community outreach initiatives.

This annual report highlights this past year's effort and also describes the critical need to move forward with increased preventive screening messages and better access for those Kentuckians who have the greatest possibility of colon cancer incidence and mortality.

John M. Bennett, MD, MPH

Chair, Kentucky Colon Cancer Screening Program Advisory Committee

Executive Summary

This annual report from the Kentucky Colon Cancer Screening Advisory Committee (KCCSAC) for July 2012 through June 2013 is mandated by KRS 214.544 to provide an implementation and outcome update as well as recommendations to the Legislative Research Commission (LRC), the Interim Joint Committee on Health and Welfare, the Interim Joint Committee on Appropriations and Revenue, the Governor, the Secretary of the Cabinet for Health and Family Services (CHFS), the Commissioner of the Department for Public Health, and the general public.

Section I: Kentucky Colon Cancer Screening Advisory Committee

Overview of the Kentucky Colon Cancer Screening Advisory Committee

Section II: The Problem of Colorectal Cancer in Kentucky: An Overview of Data

A brief overview of current data related to incidence, mortality, screening, and the burden experienced by disparate populations is found in Section II and illustrates the high burden of colon cancer in Kentucky. Kentucky has seen good success in increasing the rate of colon cancer screening using Colonoscopy or flexible Sigmoidoscopy from 34.7% in 1999 to 65.9% in 2012. The rate of screening in Kentucky is only slightly lower than the national rate of 67.3%. Despite this success, the rate at which new colon cancers are diagnosed and for deaths due to colon cancer remain high in the state, and large disparities are seen between blacks and whites and between Appalachia and Non-Appalachian counties.

Section III: Financial Impact of Colorectal Cancer in Kentucky

Colorectal cancer is a costly yet highly preventable disease. Investment in clinical preventive services has been proven cost-effective and can reduce the burden of incidence and mortality from colon cancer. The average charge for a single hospital stay in Kentucky in 2012 with a primary diagnosis of colorectal cancer was over \$52,000 and totaled more than \$110 million for the year. Although Medicare is the primary payer for the majority of cases, Kentucky Medicaid, employer-sponsored insurance and uninsured citizens also share a portion of the cost to provide care for citizens with colon cancer.

Section IV: Kentucky Colon Cancer Screening Program Outcomes – FY 12-13

The Kentucky Colon Cancer Screening Program (KSSCP) first received funds to offer services in FY 12-13. A Request for Proposal was developed and 10 Local Health Department sites and their community partners were funded to provide colon cancer screening. From March 2013-June 2013 a total of 243 Fecal Immunochemical Tests (FITS) screenings were completed. Of these 243 FITS, 26 were positive and navigated on to a colonoscopy. During this same time frame, 201 colonoscopies were completed.

Section V: Kentucky Colon Cancer Screening Advisory Committee- Partnership Efforts

The KCCSAC is comprised of diverse stakeholders who all share the vision of improving colon cancer screening rates for Kentucky citizens in an effort to aid early detection; decrease mortality; improve health; and effect cost-savings for individuals, in addition to insurers, employers, the healthcare system, and government programs. A summary of major efforts is provided.

Section VI: Education and Outreach related to the Kentucky Cancer Program

The Kentucky Cancer Program (KCP), funded through the General Assembly and administered through the University of Kentucky and the University of Louisville, continues to implement a state-wide education and awareness campaign, "Targeted Colon Cancer Outreach Program" (TCCOP). This program includes many community and individual level interventions in an effort to increase colon cancer screening throughout the state.

I. Kentucky Colon Cancer Screening Advisory Committee and Program Support

The KCCSP and the KCCSAC were established in 2008 by passage of House Bill 415 which was codified into law as KRS 214.540-544 (Appendix A). The advisory committee provides oversight for a colon cancer screening public awareness campaign in Kentucky, oversees a colon cancer screening program, and produces this annual report on implementation, outcomes, and recommendations. The makeup of the advisory committee includes members representing organizations, agencies, and survivors of colon cancer who are working toward decreasing the incidence, mortality, and burden of colon cancer in Kentucky.

The KCCSAC meets on the third Thursday of each month at 1:30 pm in the Capitol Annex. These meetings began officially in July of 2008, and minutes are accessible by public record request through the Kentucky Department for Public Health (KDPH), Division of Prevention and Quality Improvement (DPQI). Each monthly meeting is dedicated to the development of the KCCSP, a public awareness campaign, and recommendations that will move the program forward. Sample agenda items for these meetings may include: presentations of current data on incidence and mortality from the Kentucky Cancer Registry; reports from the Kentucky Cancer Program; updates to the program manual; best practice models for outreach, materials, links on the KDPH website (http://chfs.ky.gov/coloncancer); discussion of potential funding sources; and reports from sites providing screening.

The advisory committee continues to focus on developing a sustainable infrastructure for the KCCSP. According to the provisions of KRS 214.540, the program is established for the purposes of:

- (a) Increasing colon cancer screening;
- (b) Reducing morbidity and mortality from colon cancer; and
- (c) Reducing the cost of treating colon cancer among citizens of the Commonwealth.

Staff support for KCCSAC is provided by the Kentucky Department for Public Health (KDPH). KDPH and member organizations of the KCCSAC collaborate in developing the various components of the current KCCSP, such as a public awareness campaign, program eligibility guidelines, quality assurance, and data collection standards. The Kentucky Cancer Program and the Kentucky Cancer Consortium (KCC) provide technical expertise and connection to coalitions and networks of professional and lay persons working to decrease colon cancer in Kentucky. The support and work of the Colon Cancer Prevention Project through advocacy and education has been immeasurable, and the Kentucky Cancer Foundation has provided matching funds for the screening program for the biennium.

KDPH will also continue its work on integrated cancer screening and prevention efforts with the Kentucky Women's Cancer Screening Program (KWCSP), other programs within the Health Care Access Branch (HCAB), Chronic Disease Prevention Branch in the Division of Prevention and Quality Improvement, and external partners that address the needs of the uninsured, such as the local health departments (LHD) and the Federally Qualified Health Centers (FQHC). This collaborative effort will maximize outreach, avoid duplication of services, and reinforce consistent messaging.

II. The Problem of Colorectal Cancer In Kentucky: An Overview of Data

Introduction

Common, costly, and most importantly, highly preventable, colorectal cancer (CRC) generally affects individuals 50 years old and older. CRC is second behind lung cancer as the most common major type of cancer diagnosed in Kentucky and is a major contributor to the states high overall ageadjusted mortality rates¹. Kentucky experiences the highest rate of new CRC cases in the nation as well having the fourth highest rates of CRC-related mortality¹.

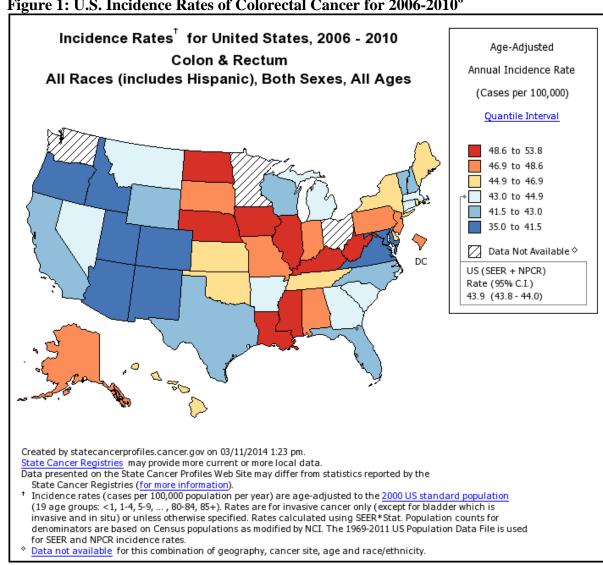
Most colon cancers develop from a type of non-cancerous growth in the colon and rectum called an adenomatous polyp. Through detection and removal of these polyps by screening, asymptomatic age appropriate people can actually prevent the disease from occurring. Depending on the type and stage of CRC when detected, as well as other individual patient characteristics, the treatment protocol may include surgery, chemotherapy, and/or radiation²⁻⁴. In addition to active treatment, maintenance follow-up and/or palliative care contributes to the overall medical costs of late stage diagnosis²⁻⁴. Regardless of the treatment methodology, treatment costs can range from \$30,000 to \$120,000 depending upon the stage of the cancer when diagnosed²⁻⁴.

In terms of the economic impact, the medical and societal costs of treating CRC are substantial². From a cost perspective, \$120,000 in Kentucky can either pay for approximately 300 screenings or cover the costs of just one late stage case of CRC treatment¹⁶. In addition to decreasing mortality rates by finding colon cancer in its pre-cancerous stage, screenings can also significantly reduce the societal financial burden associated with treatment²⁻⁴. According to the Kentucky Cancer Consortium, the average estimated cost for people with colon cancer is approximately \$55,200 per year. Additionally, the U.S. Preventive Services Task Force (USPSTF) have established that colon cancer screening strategies have been found to be "cost effective compared to no screenings" as well as having a "high-impact on colon cancer burden."²⁻⁵

This section of the report will review the key data on CRC in Kentucky, including incidence and mortality, utilization of age appropriate screening tests, and barriers to screening. Data comparing Kentucky with the nation will be reviewed and will also highlight disparities within Kentucky.

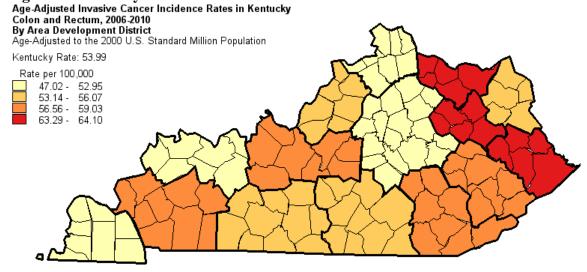
Colon Cancer Incidence

For the years 2006 to 2010 combined, the national age-adjusted CRC incidence rate was 43.9 per 100,000 compared to the Kentucky age-adjusted rate of 53.8 per 100,000 population⁶, the highest in the nation¹. The map shows eight states, including Kentucky, that are colored red indicating the highest rates in the nation⁶. The map clearly illustrates the challenge still facing Kentucky in addressing this common, costly, preventable form of cancer. Figure 1 shows the incidence rate of CRC for each state.



CRC incidence by Area Development District (ADD) ranges from 47.02 to 64.1 with all of the ADDs above the national of 43.9 per 100,000 ¹². Figure 2 and Table 1 show differences in CRC incidence by ADD with significantly higher rates in Kentucky's Appalachian region. Gateway, Big Sandy, and Buffalo Trace ADDs have the highest rates (in red).

Figure 2: Kentucky Incidence Rates of Colorectal Cancer for 2006-2010¹²



Data accessed February 11, 2014. Based on data released November 1, 2013. Copyright (C) 2014 Kentucky Cancer Registry

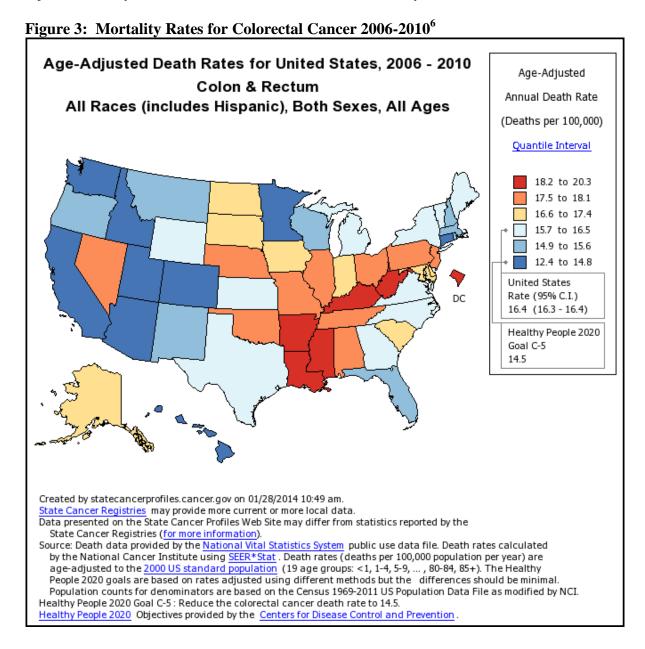
Table 1: Age-Adjusted Colorectal Cancer Mortality Rates – Kentucky Area Development Districts 2006-2010¹²

Area Development District	Population at Risk	Cases	Crude Rate	Age-Adjusted Rate
Gateway	405,243	275	67.86	64.1
Buffalo Trace	282,077	208	73.74	63.41
Big Sandy	775,114	556	71.73	63.29
Kentucky River	576,973	387	67.07	59.03
Lincoln Trail	1,315,264	782	59.46	57.78
Cumberland Valley	1,186,343	747	62.97	57.34
Pennyrile	1,088,252	699	64.23	56.56
FIVCO	687,295	475	69.11	56.07
Barren River	1,397,358	819	58.61	54.54
KIPDA	4,712,971	2,681	56.89	53.46
Lake Cumberland	1,027,835	671	65.28	53.14
Northern Kentucky	2,156,744	1096	50.82	52.95
Green River	1,060,960	648	61.08	52.44
Bluegrass	3,780,248	1,874	49.57	49.39
Purchase	977,409	593	60.67	47.02
STATE	21,430,086	12,511	58.38	53.99

Note: All rates are per 100,000. Rates are age-adjusted to the 2000 U.S. Standard Million Population. Based on data released November 1, 2013.

Colon Cancer Mortality

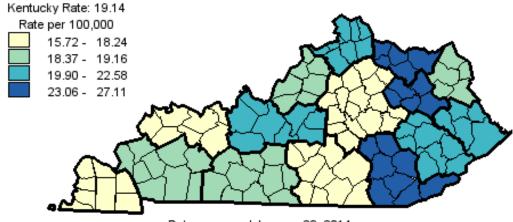
The national mortality rate for CRC for 2006-2010 combined is **16.4 per 100,000** while the rate for **Kentucky is the third highest in the nation at 19.3 per 100,000** ^{1,6}. **Figure 3** indicates the age-adjusted mortality rate due to CRC in each state for the combined years 2006-2010.



CRC mortality by Area Development District (ADD) ranges from 15.72 to 27.11 with 13 of the 15 ADDs above the national average of 16.4 per 100,000 ¹². Figure 4 and Table 2 show differences in CRC mortality by ADDs with significantly higher rates in Kentucky's Appalachian region. Gateway, Cumberland Valley, and Buffalo Trace ADDs have the highest rates (in dark blue).

Figure 4: Kentucky Mortality Rates of Colorectal Cancer for 2006-2010¹²
Age-Adjusted Cancer Mortality Rates in Kentucky
Colon and Rectum, 2006-2010
By Area Development District

Age-Adjusted to the 2000 U.S. Standard Million Population



Data accessed January 28, 2014. Based on data released October 28, 2013. Copyright (C) 2014 Kentucky Cancer Registry

Table 2: Age-Adjusted Colorectal Cancer Mortality Rates – Kentucky Area Development Districts 2006-2010¹²

Area Development District	Population at Risk	Deaths	Crude Rate	Age-Adjusted Rate
Buffalo Trace	282,077	88	31.2	27.11
Gateway	405,243	97	23.94	23.54
Cumberland Valley	1,186,343	291	24.53	23.06
Big Sandy	775,114	189	24.38	22.58
Lincoln Trail	1,315,264	279	21.21	21.13
Kentucky River	576,973	133	23.05	21.1
Northern Kentucky	2,156,744	398	18.45	19.9
Barren River	1,397,358	284	20.32	19.16
KIPDA	4,712,971	935	19.84	18.71
FIVCO	687,295	154	22.41	18.64
Pennyrile	1,088,252	223	20.49	18.37
Lake Cumberland	1,027,835	226	21.99	18.24
Bluegrass	3,780,248	663	17.54	17.81
Green River	1,060,960	205	19.32	16.44
Purchase	977,409	202	20.67	15.72
STATE	21,430,086	4,367	20.38	19.14

Note: All rates are per 100,000. Rates are age-adjusted to the 2000 U.S. Standard Million Population. Based on data released October 28, 2013.

Colorectal Cancer Screening in Kentucky

Introduction

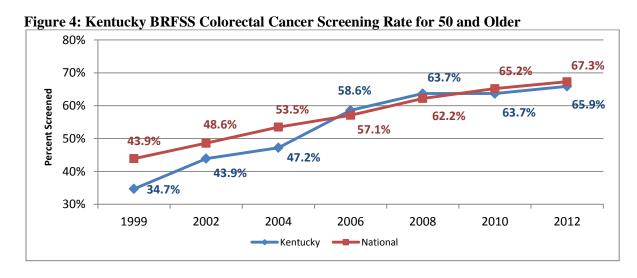
In order to reducing the number of deaths due to colorectal cancer, it is necessary to ensure that Kentuckians receive appropriate screening based on their age and risk factors. The CDC states that "when colorectal cancer is found early and treated, the 5-year relative survival rate is 90%; however, because screening rates are low, less than 40% of colorectal cancers are found early".

The U.S. Preventive Services Task Force recommends three different types of screening tests for CRC: high-sensitivity fecal occult blood testing (FOBT), flexible sigmoidoscopy, and colonoscopy. There are two types of FOBTs, a chemical guaiac test and a fecal immunochemical test (FIT), each of which is performed annually. Both tests make use of a stool sample which is most often collected at home by the patient and mailed back to either a laboratory or the provider's office for analysis, depending on the brand and type of test used. FITs have shown a higher sensitivity and specificity than guaiac FOBTs in the detection of CRC. Because of this, the Kentucky Colon Cancer Screening Program uses FIT testing¹⁵. Instead of a stool test, a flexible sigmoidoscopy may be performed every five years to look for cancerous growth in the rectum and lower third of the colon¹⁶. Lastly, a colonoscopy may be performed every 10 years to check the entire colon for cancerous growth¹⁶.

For all individuals over the age of 50, screening is highly recommended to detect CRC⁵. However, the aforementioned methods vary in both financial costs and indirect burdens to the patient. Therefore, the CDC recommends that individuals consult their healthcare provider to determine the appropriate test as family history, personal medical history, and numerous other risk factors contribute to that decision¹⁶.

Kentucky Screening Rates

Kentucky has made significant progress since 1999 with increasing colorectal cancer screening rates; however, there is still much work to be done. **Figure 4** shows the trend for Kentucky in the percentage of those aged 50 and older who have been screened for colorectal cancer using a sigmoidoscopy or colonoscopy. The **2012 screening rate for Kentucky is 65.9%, which is slightly below the national rate of 67.3%** based on the 2012 Kentucky and CDC Behavioral Risk Factor Surveillance System (BRFSS) data⁹.



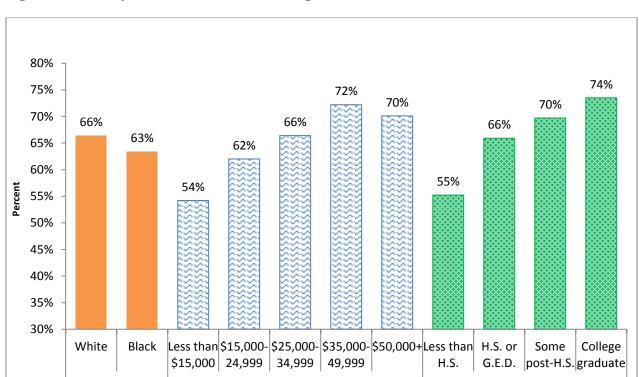
There is some indication that Kentuckians, employers, providers, and insurers are sharing the message that colon cancer screening saves lives. Over the past few years, Kentucky has shown substantial improvement in screening rates according to BRFSS as noted previously by **Figure 4**. However, rates for uninsured and low income persons remains lower than for those with college degrees and incomes over \$50,000. With passage of the Affordable Care Act (ACA) and expansion of Medicaid eligibility in Kentucky, we anticipate the lack of insurance will be a less common barrier to CRC screening. The U.S. Preventive Services Task Force (USPSTF) reviewed the main screening strategies for colorectal cancer and found that all were "cost effective compared with no screenings." Additional prevention studies identify colorectal cancer screening as a high-impact, cost-effective service⁴.

Disparities in Colorectal Cancer Screening

Race

Figure 5 shows the breakdown by education and income for Kentuckians aged 50 and older who have <u>never been screened for colorectal cancer</u> using either a sigmoidoscopy or a colonoscopy. Overall, slightly **more than a third of Kentuckians who meet the age criteria have not been screened** (36.3%). However, the data clearly show that the rate of <u>not being screened</u> is much **higher for those with lower levels of education and lower income levels**¹⁰.

Screening rates vary greatly depending on income and education levels. Figure 5 shows this disparity in which only 54% of those in the lowest income level having been screened compared to 70% in the highest income bracket. Similarly, only 55% of those with less than a high school degree have been screened compared to 74% of those with a college education.



Income

Figure 5: Kentucky BRFSS 2012 CRC Screening Rates Based on Race, Income, and Education

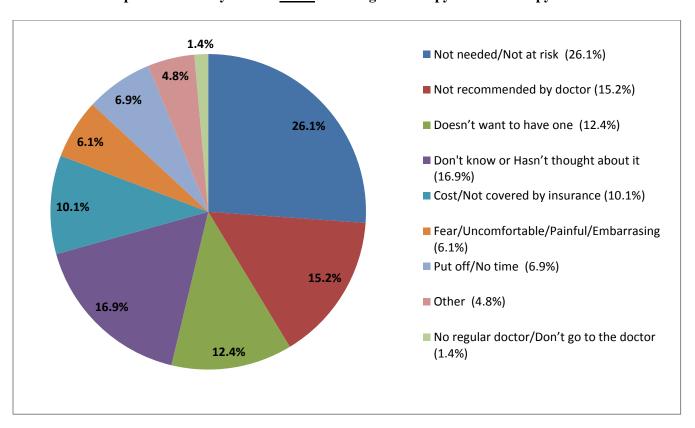
Education

Barriers to Colonoscopy in Kentucky

In order to improve colon cancer screening rates, it is important to understand the reasons that people do not have colonoscopies or flexible sigmoidoscopies. In 2008 and 2012 an optional question was added to the Kentucky BRFSS for persons 50 years and older to gain insight into these reasons. The 2008 data was analyzed by KDPH epidemiologists and a work group from the KCC and distributed to partners for dissemination across the state and incorporation into their work plans to reduce barriers and increase screening.

In response to the 2008 information, members of the Colon Cancer Screening Advisory Committee focused on lack of provider recommendation, the second most reported reason for never having a colon cancer screening. Members of the advisory committee and KCCSP staff submitted the collaboratively written article, "Barriers to Colon Cancer Screening in Kentucky," to the Journal of the Kentucky Medical Association which was published in March 2011¹¹. This article reviewed the data on colorectal cancer in Kentucky and encouraged providers to work with their patients to increase screening referrals and patient compliance. **Figure 6** highlights the major reasons reported for never having a colonoscopy or sigmoidoscopy in 2012¹⁰. A significant improvement has been noted in provider recommendation.

Figure 6: Kentucky BRFSS 2012 Barriers to Colon Cancer Screening (Adults 50 and older): What is the most important reason you have never had a Sigmoidoscopy or Colonoscopy?



Disparities in the Incidence of Colorectal Cancer in Kentucky

When examining gender, race, and geographic location in terms of disparities, Kentucky has higher rates of <u>colorectal cancer incidence</u>, meaning new cases of cancer in all categories compared to the rest of the

nation. In Kentucky, males overall have a higher incidence rate of colorectal cancer than females. The largest disparity is observed in race and is especially prominent for black males who have a much higher rate than their white male counterparts. Black females also experience higher incidence rates than white females. In addition, residents of Kentucky's Appalachian counties have a higher incidence rate than both the rest of the state and the nation overall. **Figure 7 and Table 2** highlight the disparities between gender, race, and geographic location in Kentucky and compares them the national averages.

Figure 7: Kentucky Colorectal Invasive Cancer Age-Adjusted Incidence Rates, 2005-2009. All Rates per 100,000.

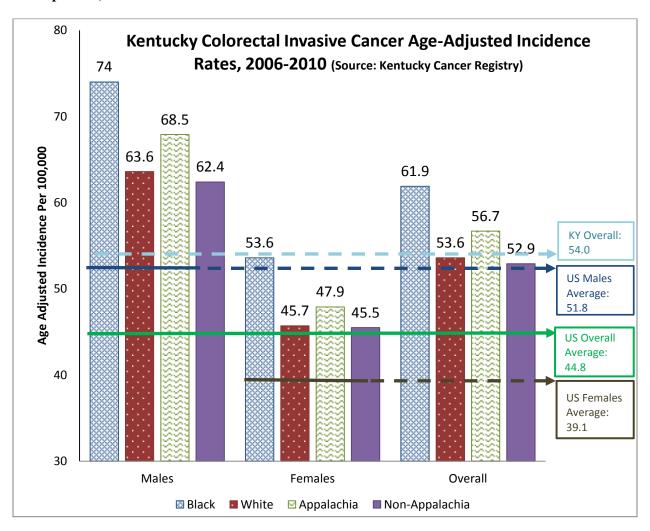
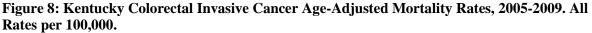


	Table 2: Kentucky and US Colorectal Invasive Cancer Age- Adjusted Incidence Rates per 100,000, 2006-2010					
Population	Ma	les	Fem	ales	Total	Total
	US ¹	KY ¹²	US ¹	KY ¹²	US ¹	KY ¹²
All	51.8	64.0	39.1	46.1	44.8	54.0
Black	62.4	74.0	46.6	53.6	52.9	61.9
White	50.6	63.6	38.1	45.7	43.7	53.6
Appalachia		67.9		47.9		56.7
Non-Appalachia		62.4		45.5		52.9

Disparities in the Mortality of Colorectal Cancer in Kentucky

Figure 8 and Table 3 below show that Kentuckians experiences significant disparities in terms of colorectal cancer <u>mortality</u> in all categories compared to the rest of the nation. The racial disparity is illustrated again for black males and females who have a much higher death rate from colorectal cancer than their white counterparts. The geographic disparity is again seen with residents of Kentucky's Appalachian counties having a higher mortality rate than the rest of the state and the nation overall.



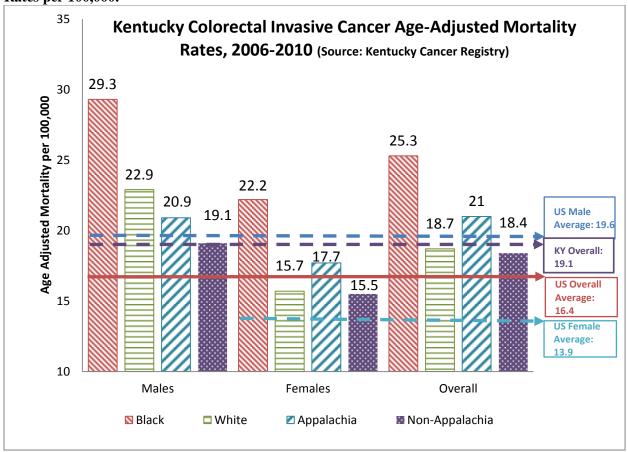


	Table 3: Kentucky and US Age-Adjusted Colorectal Cancer Mortality Rates per 100,000, 2006-2010					
Population	Males Females Total					
	US^1	KY^{12}	US ¹	KY ¹²	US ¹	KY ¹²
All	19.6	23.2	13.9	16.1	16.4	19.1
Black	28.7	29.3	19.0	22.2	22.8	25.3
White	19.1	22.9	13.4	15.7	15.9	18.7
Appalachia		20.9		17.7		21.0
Non-Appalachia	i	19.1		15.5	1	18.4

III. Financial Impact of Colorectal Cancer in Kentucky

A diagnosis of cancer leads to a variety of costs to the patient, their family, and the community. Most direct costs are related to diagnosis and staging, treatment in hospital, and outpatient and follow-up care. In addition to direct medical costs to patients and families, there are out-of-pocket expenses such as travel to appointments, loss of income during treatment or permanent loss of work. Additional indirect costs include those incurred by the employer related to missed work, lower productivity, and higher insurance premiums. Colon cancer treatment varies based on the stage at diagnosis, and this also greatly impacts treatment cost. Colorectal cancer treatment can range from surgical removal of a polyp to removal of part or the entire colon, or surgery combined with chemotherapy, and/or radiation⁵. The most recent estimates from the National Cancer Institute show that treatment of CRC in the first year after diagnosis costs an average of \$51,000 with continuing care costs of \$3,000 per year⁴.

The figure below reflects inpatient hospitalizations from Kentucky hospitals for which colon cancer is indicated as the primary diagnosis. Inpatient hospitalization data reflects only a portion of the total charges to the individuals, employers, and payers, namely those charges incurred during a hospital stay. Significant costs are also incurred on an outpatient basis, including costs for chemotherapy and/or radiation, laboratory, and follow-up imaging studies to gauge effectiveness of treatment.

Despite the fact that the number of inpatient discharges remains fairly stable between 2,200 and 1,900, inpatient charges have steadily increased from \$80 million dollars in 2006 to over \$110 million in 2012. Moreover, charges for the 2,179 discharges in 2006 cost around \$80 million as compared to charges of \$110.6 million for the 2,114 discharges 2012.

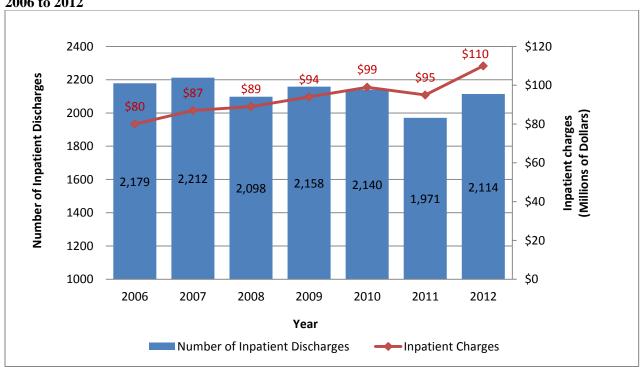


Figure 9: Inpatient Discharges from Kentucky Hospitals: Primary Diagnosis of Colorectal Cancer, 2006 to 2012

Source: Office of Health Policy, Cabinet for Health and Family Services, Hospitalization Data

Table 3 summarizes the inpatient hospitalization discharge information for CRC as the primary diagnosis and shows that men and women are hospitalized at very similar numbers. Men have slightly longer stays and higher average charges compared to women.

Table 3: 2012 Inpatient hospitalization discharges with a primary diagnosis of CRC						
Gender	Discharges	Average Length of Stay	Average Charges	Total Charges		
Female	1011	7.87	\$48,859	\$49,397,049		
Male	1103	8.31	\$55,488	\$61,203,820		
Total	2114	8.10	\$52,318	\$110,600,869		

^{*}Actual costs may vary as they are based on contractual agreements between providers and payers. Source: Office of Health Policy, Cabinet for Health and Family Services, Hospitalization Data

Table 4 summarizes the inpatient hospitalization discharge information for any diagnosis with CRC. This additional data for hospital inpatient admissions for any diagnosis *and* colorectal cancer demonstrate that there is a great impact on those who have a history of colon cancer.

Table 4: 2012 Inpatient hospitalization discharges with any diagnosis with CRC					
Gender	Discharges	Average Length of Stay	Average Charges	Total Charges	
Female	2,144	6.88	\$40,563	\$86,967,079	
Male	2,255	7.05	\$46,033	\$103,805,469	
Total	4,399	6.97	\$43,367	\$190,772,548	

^{*}Actual costs may vary as they are based on contractual agreements between providers and payers. Source: Office of Health Policy, Cabinet for Health and Family Services, Hospitalization Data

For the cancer patient, co-pays and out-of-pocket expenses can directly contribute to the significant financial burdens¹⁷. Furthermore, the time patients spend on care directly or indirectly, such as hospitalization stays and travel to treatment facilities respectively, can potentially affect employers as well such as costs from absenteeism^{18, 19}.

Employers interested in saving money through prevention should review the numbers of persons and costs covered by the organization's health plan and determine if there have been inpatient hospital admissions and ongoing treatment for colorectal cancer ²⁰. It is possible that high quality health messaging and eliminating barriers to colon cancer screening would reduce these costs.

Costs of Colorectal Cancer by Coverage

Medicare patients were hospitalized 1,250 times and account for 59% of the charges for a primary diagnosis of CRC or \$65,463,200. Table 5 below shows that overall there were 2,625 total hospitalizations for Medicare recipients with any diagnosis *and* colorectal cancer, with total charges of \$113,051,183; again indicating the need for screening and prevention strategies.

There were 138 hospital admissions for people covered by Kentucky Medicaid with a primary diagnosis of colorectal cancer in 2012 with charges of **\$8,907,606**. There were 354 hospital admissions with any diagnosis *and* colorectal cancer for patients covered by Medicaid with total charges of **\$17,369,166** in 2012. These costs have gone up incrementally over the years and have an impact on the state budget.

For people with no insurance, there were 64 hospitalizations in 2012 for a primary diagnosis of colorectal cancer with charges of \$2,907,705 and an additional 13 hospitalizations which were charity covered by the hospitals. With the Kentucky Health Benefit Exchange (*kynect*) and Kentucky's expansion of the Medicaid program, both are expected to increase screening and prevention for those who have been uninsured in the past which will hopefully decrease admissions for colorectal cancer.

Table 5 summarizes the payer characteristics of inpatient admission procedures in 2012 for Kentucky.

Table 5: 2012 Inpatient Admission Procedures by Payer					
D	Primary Di	agnosis of CRC	Any Diagnosis with CRC		
Payer	Discharges	Total Charges	Discharges	Total Charges	
Medicare	1,250	\$65,463,200	2,625	\$113,051,183	
Medicaid	138	\$8,907,606	354	\$17,369,166	
Uninsured	64	\$2,907,705	75	\$2,716,118	
Commercial	603	\$30,520,938	1,158	\$50,721,157	
Charity	13	\$756,504	31	\$1,463,590	

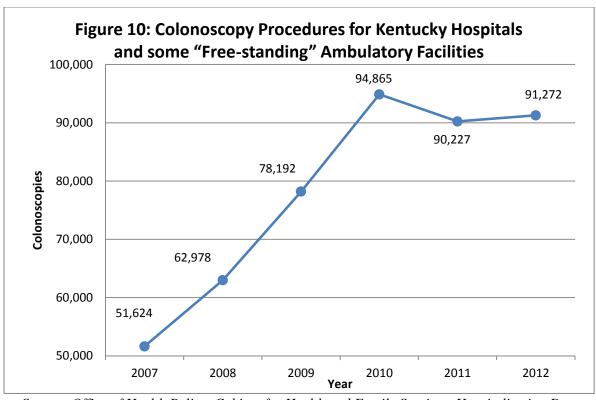
Source: Office of Health Policy, Cabinet for Health and Family Services, Hospitalization Data

Table 6 and Figure 10 represents outpatient service claim records, including those records submitted by a hospital with an affiliated Ambulatory Facility and for some "Free-standing" Ambulatory Facilities. Free-standing ambulatory facilities only recently began submitting data to the Kentucky Office of Health Policy so it is difficult to compare data over the years. Preventive screening codes with and without polyp removal, as well as some diagnostic colonoscopy procedure codes, are utilized for this report as it was impossible to differentiate from billing codes whether the procedure was simply a preventive screening and resulted in a polyp being removed.

Commercial insurance continues to account for the largest coverage source for colonoscopies, which would be expected as most colonoscopies completed in the state are for those in the 50-64 year age group. In 2012, there were 48,782 colonoscopy procedures covered by commercial payer and 3,188 colonoscopies reported as covered by Medicaid. In 2012 there were 1,072 colonoscopies reported as self-pay and an additional 415 colonoscopies reported as charity. In the March 2011 Journal of the Kentucky Medical Association, Dr. Tucker, et al published findings that patients who lacked insurance had more than twice the odds of being diagnosed with advanced colorectal cancer¹³.

Table 6: 2012 Outpatient Colonoscopy Procedures by Payer							
Payer	Payer Discharges Total Charges						
Medicare	36,614	\$138,665,315					
Medicaid	3,188	\$14,292,789					
Self-pay	1,072	\$3,436,976					
Commercial	48,782	\$152,686,543					
Charity	415	\$1,824,684					

Source: Office of Health Policy, Cabinet for Health and Family Services, Hospitalization Data



Source: Office of Health Policy, Cabinet for Health and Family Services, Hospitalization Data

Conclusion

Despite an improvement in colorectal cancer screening rates over the past few years, Kentucky still faces a major problem with colon cancer. The state still ranks among the highest in terms of CRC mortality and incidence rates as well as below the national average for screening. Problems such as screening disparities among different groups of people signify roadblocks to the ultimate goal of a healthy Kentucky. Therefore, while the combined efforts of all involved parties helped Kentucky improve greatly, there is still much work to be done. Given the rising costs of treating colon cancer after diagnosis, CRC prevention through colonoscopies and/or fecal immunochemical tests represents a cost-effective way of saving lives in Kentucky. Moving forward, the Kentucky Colon Cancer Screening Program continues to provide education, outreach, leadership, and public awareness for prevention through screening. State funding appropriated in Fiscal Year 2014 will help remove barriers to screening for the uninsured. With the Kentucky Health Benefit Exchange (*kynect*) and Kentucky's expansion of the Medicaid program beginning January 1, 2014, both will provide access to care and are expected to increase screening and prevention for those who have been uninsured in the past which will hopefully decrease cancer diagnosis and delay the stage of diagnosis of colorectal cancer.

IV. Kentucky Colon Cancer Screening Program FY12-13

In its 2012 Regular Session, the Kentucky General Assembly approved the biennial budget, which for the first time, included \$500,000 per year in funds to KDPH for colon cancer screening of uninsured Kentuckians. The Kentucky Cancer Foundation, a new private non-profit organization committed to providing equal matching funds for the program, was created. The KCCSP has three main goals from its directive including: increasing colon cancer screening, reducing morbidity and mortality from colon cancer, and reducing the cost of treating colon cancer among citizens of the commonwealth. Funds are used to support state clinical and management staff; outreach and education support by the Kentucky Cancer Program (KCP); health care provider costs associated with both colonoscopy services and FIT kits; local patient navigation services; and leasing fees for the FIT analyzer, which is housed at the State Public Health Lab (KDPH).

Development of program guidelines

Working with an advisory committee, KDPH developed guidelines and protocols for program operations to ensure effectiveness and consistency across all funded sites. At the center of these guidelines are evidence-based criteria for screening tests and for determining who is eligible for screening. At the current level of funding, it is anticipated that KCCSP could screen up to 1,000 individuals annually for colon cancer. To be eligible for this program, clients must be between the ages of 50-64 (African Americans age 45-64) or qualify with certain high risk conditions/factors; a United States citizen or qualified alien; a legal resident of Kentucky; uninsured; and their income must be at or below 250% of the federal poverty level.

Eligible clients determined to be at average risk for colon cancer are screened using a take home test called a FIT or Fecal Immunochemical Test, which uses antibodies directed against human hemoglobin to detect blood in the stool. The person uses the FIT Kit to collect a stool sample which is mailed to the KDPH for analysis. The use of FIT tests is very cost effective in comparison to the much higher expense associated with colonoscopy. When done on an annual basis, FIT testing is highly accurate in detecting adenomas in the lower colon.

Colonoscopy is the screening test of choice for clients who are found to be a moderate or high risk for colon cancer and those who have a positive FIT test. These clients are connected to a health care provider contracted by the program to receive a colonoscopy to identify and remove any benign, precancerous, or cancerous polyps. Removal of polyps before they become cancers saves lives and reduces health care costs by avoiding expensive surgeries or treatment of advanced cancer with chemotherapy or radiation

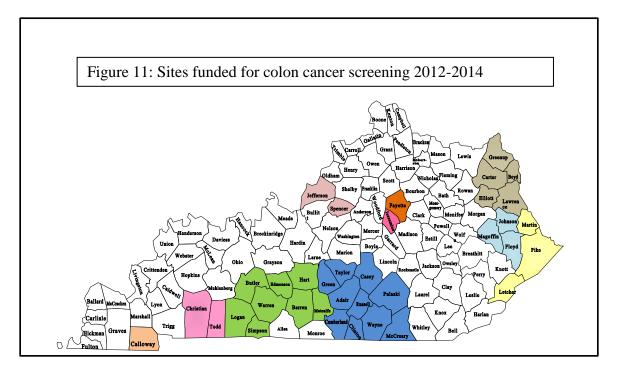
One key component of the program is the use of Patient Navigators (PNs) to assist the patient in successfully completing the colon cancer screening process. Each funded site is required to identify patient navigators who must complete a training program conducted by state KCCSP staff. The patient navigator guides the client through each step of the colon cancer screening process and documents the test results in the state laboratory data system.

Additionally, funded sites are required to establish contracts with local health care providers who are contractually responsible for any needed pre-colonoscopy medical clearance and for all services connected to the colonoscopy, including facilities charges, anesthesia, removal of any polyps and pathology, and preparation for the procedure. These criteria were included in the Request for Proposals from potential sites to make certain that participants would achieve the maximum benefit from the program.

Selection of Colon Cancer Screening Sites

Working with the colon cancer advisory committee, KDPH staff developed a "Request for Proposal" (RFP) process to solicit applications from local health departments and their partners. The RFP was released in June of 2012 with a due date of September 24, 2012. Local health departments (LHD) brought together community partners to apply for this funding, and they also serve as the fiscal agent in administering these grants. As fiscal agent, the local health department is the entity that receives the grant funds from the state and the entity which establishes contracts with local hospitals, endoscopists, Federally Qualified Health Centers, Community Health Clinics, or other providers as necessary to carry out services funded under this grant. Service providers must provide agreed upon documentation of services provided to the LHD for reimbursement at the specified rates.

Ten grant applications were reviewed by a six person panel from the KCCSAC which scored the proposals on a number of criteria. All 10 grant applications were awarded funding based of their applications with only minor adjustments to align with the program requirements. Funded sites were notified in November 2013. The average grant award was \$50,000 - \$75,000 per applicant per year. Figure 11 shows the sites funded for the first 2 year cycle.



Program Start-Up

Between September 2012 and December 2012, KDPH staff worked to develop data collection forms, training materials, and a data entry process. The database system for the KCCSP, OutReach, is housed in the KDPH Division of Laboratory Services. Since this database is already used by local health department personnel, it was chosen to minimize overall costs and eliminate duplicate data entry. Although there was no cost for initial data entry, quality improvement, and content-specific query development, outcome reporting and evaluation did incur some expense. However, compared to the cost of developing a database from the ground up, using OutReach was an efficient use of budgeted funds.

Sixty-six Patient Navigators and partners including KCP staff were trained from December 19, 2012, through end of January 2013. Training consisted of attending all-day face-to-face interactive and handson trainings in Frankfort Kentucky and included:

- Brief Program History and Description
- Screening Methods Reimbursed by KCCSP
- Program Eligibility
- Screening and Surveillance Guidelines
- Program Forms and Use
- Patient Navigation Responsibilities
- Data Collection and data entry into OutReach System (training on the OutReach system was provided by Kentucky Division of Laboratory Services)
- Reimbursement for Services
- Resources

Additional trainings and technical assistance continue to be delivered by KCCSP staff as the need arises.

KCCSP Launch

Provision of colon cancer screening services began in March 2013. Soon after this initial rollout, state KCCSP staff traveled to each grant site to meet with field staff and partners. The goal of the site visits was to assess the working partnerships, reinforce the information shared in the training sessions, and to confirm that each grant site was collaborating with local partners. While the KCCSP has overarching structure and programmatic requirements, such as use of specific forms, each KCCSP site worked with state staff on how to best incorporate the KCCSP into their health department and community. Additional site visits were made to the individual patient navigation locations to evaluate their role in the program; spot check records for completeness of records; and to address any specific questions, needs, or concerns. Support for all the KCCSP sites included technical assistance (TA) conference calls every month to address any concerns from screening sites and inform them of program changes, reinforce information, and offer opportunities for networking and sharing of best-practices.

Initial Program Outcomes

From March 2013-June 2013 a total of 243 FIT's screenings were completed. Of these 243 FIT's, 26

were positive and navigated on to a colonoscopy. During this same time frame, 201 colonoscopies were completed. The following tables show basic colonoscopy results.

First, **Table 7** shows how the endoscopist rated the quality of the patient's preparation or "prep" for the procedure. Excellent or Good preparation for the procedure is essential to ensure that colon is clear of fecal matter so the physician can view the entire surface of the colon and identify any pre-cancerous or cancerous polyps. Over 80% of clients were considered to have had good or excellent "prep" for their procedure. Ten percent of the colonoscopy repots did not include prep quality. Because this is an important quality control measure for the KCCSP, we have modified contract language with providers to ensure that this is reported beginning in 2014.

Table 7: FY12/13 Reported Prep						
•	ality					
(Includes all scopes Ma 28,	arch 1 2013 t 2013)	hrough June				
Poor 5 2.5%						
Fair	13	6.5%				
Good	75	37.3%				
Excellent	87	43.3%				
Not Reported 21 10.4%						
Total	201	100%				

In order to enhance cost effectiveness for the program, colonoscopies are the initial screening test only for those considered to be above average risk for colon cancer. During the initial months of the KCCSP program, the two most common reasons for categorizing a person as being at increased risk for colon cancer were having a first degree relative with colon cancer prior to age 60 (50 cases, 25%), and noticing bright red blood in their bowel movements (49 cases, 24%). The third most common reason for being at increased risk came from those who had previously had polyps removed from their colon (34 cases, 17%).

Table 8 shows the final diagnosis from the first 201 colonoscopies performed with KCCSP funds. As the table shows, almost 60% of the cases resulted in a normal/negative finding. An additional 14% of cases (28) had hyperplastic polyps removed. These polyps very rarely develop into a cancer. However, 25% of cases (50) had low grade Adenomatous polyps removed and an additional 2% (4 cases) had high grade Adenomatous polyps removed. Most Adenomatous polyps eventually develop into cancers, and their removal actually constitutes the prevention of colon cancer. Therefore, in the initial four months of program operation some 50 cases of cancer were prevented. There was one case of colon cancer diagnosed during this time period.

Table 8: FY 12/13 Colonoscopies - Final Diagnosis (Includes all procedures March 1 2013 through June 28, 2013)				
Normal/Negative 118 58.7%				
Hyperplastic Polyp	28	13.9%		
Adenomatous-Not High Grade	50	24.9%		
Adenomatous-High Grade	4	2.0%		
Cancer	1	.5%		
Total	201	100%		

V. Kentucky Colon Cancer Screening Advisory Committee-Partnership Efforts: Awareness, Education, and Outreach Efforts of Partner Organizations

American Cancer Society Cancer Action Network (ACS CAN):

• Policy Efforts:

- o Strongly supported the Kentucky-based Health Care Exchange (kynect) implementation to ensure thousands of Kentuckians have access to care and screenings for colon cancer.
- Supported implementation of the national Affordable Care Act which eliminates copayments for preventative services like colonoscopies and exempts preventative services from deductibles under the Medicare program.
- O Advocated for the expansion of the Medicaid program in Kentucky to ensure more at risk citizens have access to vital medical and preventative services.

• Patient Support Services:

o ACS Hope Lodge in Lexington continues to provide patient support services to colon cancer patients with over 200 nights of free lodging provided to patients and families.

• Navigation Services:

 An on-site Patient Navigator Program continues at University of Kentucky Markey Cancer Center, connecting cancer patients with ACS programs and services, as well as community resources.

Cabinet for Health and Family Services (CHFS)- Kentucky Department for Public Health (KDPH):

• Data System and Website:

- KDPH maintains and updates the Kentucky Colon Cancer Screening Program website
 with information including the annual report and education for the public, health
 educators, and providers as well as links to additional partner organizations.
 http://chfs.ky.gov/coloncancer
- CHFS and KDPH provide data on colon cancer screening via the Behavioral Risk Factor Surveillance System, hospital discharge data through the Office of Health Policy, and mortality surveillance from the Office of Vital Statistics.

• <u>Technical Assistance</u>:

 KDPH provides ongoing technical assistance to local health departments and management for the development of colon cancer screening programs within the state, including Kentucky Colon Cancer Screening Program sites as well as those receiving Coal Severance Funds. (See Section IV)

• Worksite Wellness:

The Colon Cancer Screening Program worked collaboratively with the Kentucky Cancer Program to host a special Dress in Blue Day focused on Colon Cancer Screening Awareness for state employees in March of 2013. Ms. Madeline Abramson met with state employee representatives to emphasize the importance of colon cancer screening and to summarize the planned events of the day that each employee could implement in the workplace. Approximately 30,000 employees were exposed to the colon cancer screening awareness message via their state payroll stub

• Education and Outreach:

 Use of Preventive Health and Health Services Block Grant to support staff and for the Educational Colon East and West. These giant inflatable model colons are used across the state to educate Kentuckians about the risks of colon cancer preventive screening through a walk-through educational colon.

Coal Severance Funds:

- During the 2012 Legislative Session, \$170,000 was allocated in the biennial budget of 2012-2014 for distribution to the counties of Floyd, Knott, and Pike. Coal severance funds were used to implement colon cancer education and screening.
- As of June 2013, 77 persons had been screened using coal severance funding. Polyps, which could have developed into cancer, were removed from 34 individuals, and no cases of colon cancer were detected.
- Pike County's screening program has been active since 2007, using local tax dollars directed by its board of health. Since the 2007 implementation, 235 individuals have been screened. Of those screened, 31% had polyps that were removed, thus preventing the risk that they could develop into colon cancer. An additional seven individuals were diagnosed with cancer as a result of this program.

Colon Cancer Prevention Project (C2P2):

• Education and Outreach:

- The Colon Cancer Prevention Project has a patient navigator and health educator who
 participates as a partner in the Louisville Metro Colon Cancer Screening Program,
 linking patients who need colonoscopies to gastroenterologists in the area.
- The Project manages the Incredible Inflatable Colon for KDPH, a job that includes managing the colon's schedule and ensuring it is providing education across the community.
- The Project in 2013 updated its "Are You at Risk for Colon Cancer?" brochure, of which more than 1.2 million have been distributed across Kentucky and the U.S. The Project printed 250,000 copies of this brochure, which provides information on colon cancer risks, symptoms, and screening options.
- The Project in 2013 created materials that provide information on stool based screening tests to the community.
- The Project works with national partners to raise awareness of the rise of people under 50 being diagnosed with colon cancer.
- The Project held its 7th Annual Walk Away from Colon Cancer & 5K Run in Louisville in August 2012. The event was the largest yet with more than 1,000 survivors, patients, physicians, and concerned members of the community participating.
- The Project held its 2nd Annual Bottoms Up Bash Presented by KentuckyOne Health in March 2013, drawing a crowd of 500 who raised funds for the fight to end colon cancer. The Bash was held on Dress in Blue Day and brought publicity to colon cancer screening.

• Policy Efforts:

- The Project is working on a CDC grant with the Kentucky Cancer Consortium that directly addresses policy work for colon cancer and the barriers to screening. One aspect of this work includes building a media strategy specific to colon cancer.
- The Project worked with partners such as the Kentucky Cancer Foundation and others to successfully advocate for funding for the Kentucky Colon Cancer Screening Program for 2013-2014. C2P2 continues to work with partners including the KCCSP Advisory Board on ways to continue this funding over time.

• Survivor Support

- o The Project launched a second survivor support group in Louisville in early 2013.
- The Project launched the Fighters' Fund, a program that provides one-time grant assistance to people in Kentucky and Southern Indiana who are in treatment for colon cancer.

Kentucky Cancer Consortium

- The Kentucky Cancer Consortium (KCC) includes over 55 statewide and multi-regional organizations working to reduce the burden of cancer in Kentucky. KCC meets quarterly to work collaboratively on addressing Goals, Objectives, and Strategies in the Kentucky Cancer Action Plan.
- Goal 7 in the Cancer Action Plan is to "reduce incidence and mortality from colon cancer through
 prevention and early detection." Progress towards this goal is measured through tracking colon
 cancer screening rates through the Behavioral Risk Factor Surveillance System, which includes a
 special focus on those who have not completed a high school education. Another measure
 includes the percentage of Kentuckians diagnosed at an early stage of colon cancer when the
 disease is more effectively treated.
- KCC has focused its collective efforts on supporting outreach and organizational/systems-level changes to assist Kentuckians in obtaining a colon cancer screening. These systems level efforts included:
 - Assessing community-clinical and infrastructure needs of the healthcare system in Kentucky
 - Conducted two 1.5 hour webinar trainings regarding best practices in fostering Community-Clinical linkages in cancer control, especially as related to colon cancer screening.
 - Providing funding for the Kentucky Cancer Program to educate worksites and their employees on colon cancer, the need for screening, and organizational/policy changes which support employees obtaining a screening.
 - Fifteen regional directories were developed in an attempt to increase access to colon cancer screening facilities, physicians, and general resources (transportation, etc.)
 - Providing funding for the Kentucky Cancer Program to educate worksites on promoting other health and wellness activities in their workplace which reduce the burden of cancer, specifically by conducting a feasibility assessment of the CEO Cancer Gold Standard Program.
 - Conducted two 1.5 hour webinars for Kentucky Cancer Program Regional Cancer Control Specialists on health policy, systems, and environmental (PSE) change in cancer control.
 - Conducting presentations at 10 Kentucky Cancer Program District Cancer Council
 meetings on strengthening community-clinical linkages in colorectal cancer screening
 designed to support and strengthen the capacity of the coalitions to educate and inform
 key stakeholders.
 - Hosting the first statewide Cancer Patient Navigation Forum with over 75 cancer patient navigation professionals in attendance, including representatives from the KCCSP staff and funded sites.
 - Support for implementation of the Kentucky Colon Cancer Screening Program (KCCSP) through active monthly participation on the Kentucky Colon Cancer Screening Advisory Committee, assisting in coordinating a regional Colon Cancer Forum for stakeholders in Northern Kentucky in December 2012, and development of a KCCSP site survey to

identify facilitators and barriers to successful initial implementation of a state colon cancer screening program.

- Continued funding of the online domain name www.kycolon.org for use with all materials.
- Promoted March's colon cancer screening awareness "Dress in Blue" day among member organizations and their networks.
- Updated "Mortality from Screenable Cancers" materials for all 15 Kentucky Area Development Districts detailing the deaths from preventable cancers in their ADD with a focus on colon cancer.
- Educated and informed organization members as to KCCSP funding status and opportunities to educate legislators.

Kentucky Cancer Registry (KCR):

• Surveillance Data:

- o KCR continues to present data related to colorectal cancer incidence, mortality, and screening rates to partner organizations, Advisory Committee members, legislative members, and the general public. In addition, special attention is focused on disparate populations. This emphasis on statistical evidence helps diverse partners determine their work plan activities. Data presentations also assure the dissemination of this important information.
- KCR has continued to strengthen its working relationship with academic institutions, particularly with the University of Kentucky Markey Cancer Program and the University of Louisville Brown Cancer Center.

Northern Kentucky Colon Cancer Partnership Forum:

• Partnership Forum:

- O The Kentucky Department for Public Health provided funding through the Preventive Health and Health Services Block Grant for a fall forum which included presentations on data, best practices, Faces of Colon Cancer, survivor stories, and input from community policy and decision makers. The forum was held in collaboration with the Northern Kentucky Independent District Health Department, the Kentucky Cancer Program, the Kentucky Cancer Consortium, and the Colon Cancer Prevention Project.
- The purpose of the partnership event was to share ideas, develop relationships for possible future collaborations, and discuss what is working to increase colon cancer screening rates among the uninsured and underinsured population in Kentucky.

VI. Education and Outreach related to the Kentucky Cancer Program

As part of KRS 214.544, Section 3.8, the Kentucky Cancer Program, jointly administered by the University of Kentucky and University of Louisville, shall establish a colon cancer screening education and outreach program in each of the state area development districts. The program shall focus on individuals who lack access to colon cancer screening.

The Kentucky Cancer Program (KCP) continued to coordinate the "Targeted Colon Cancer Outreach Program" (TCCOP) established in fall 2009. This evidence-based model provides a foundation for implementing colon cancer screening education and outreach activities in each of Kentucky's 15 Area Development Districts, including the 10 funded Kentucky Colon Cancer Screening Program sites.

The initiative encourages community organizations and groups to coordinate their efforts and form partnerships. It provides a broad framework of possible strategies from which organizations can work, including media campaigns, distribution of educational materials and key messages, educational programs for the public and health care providers, and special initiatives such as "Dress in Blue Day." Reaching people who are uninsured and do not have access to colon cancer screening is a program priority.

During the past year, the Kentucky Cancer Program provided funding for many TCCOP activities. Support was also provided by the Kentucky Cancer Consortium and in-kind contributions/resources from hundreds of partners, including hospitals, clinics, pharmacies, universities and colleges, American Cancer Society, health departments, Cooperative Extension Service offices, Area Health Education Centers, businesses, chambers of commerce, government agencies, public schools, churches, libraries, and individuals. These partners integrated colon cancer education and outreach into their existing services.

Targeted funding was provided by the Kentucky Colon Cancer Screening Program for education and outreach materials and small media for the 10 health departments participating in the new colon cancer screening program. KCP developed materials, public service announcements and displays to promote the program and recruit people to be screened. KCP also worked with the funded sites to secure contracts with providers, identify special populations and provide education to individuals and groups.

Highlights of activities for the past year are summarized below.

During Fiscal Year 2012-2013, District Cancer Council and Colon Cancer Committee meetings were held across the state with representatives of community organizations and groups. The meetings focused on providing updated district colon cancer data, sharing a 3 year report of TCCOP activities for the state, planning for the development of a colon cancer screening directory for every area development district, and preparing for National Colon Cancer Awareness Month and Dress in Blue Day activities statewide.

There is a strong commitment among District Cancer Councils (DCC) to continue TCCOP because of its success in increasing awareness and screening and mobilizing community resources.

Public Awareness and Educational Materials

- Organizations/groups/businesses distributed over 37,400 posters, bookmarks, and church bulletins containing key messages about colon cancer screening in all 120 counties.
- Over 32,700 promotional pieces and 30,700 educational materials were disseminated across the state.

Dress In Blue Campaign

• Over 480 partners participated in this national campaign to raise awareness about screening.

• In addition to wearing blue on March 1, 2013, hundreds of special events and activities took place throughout Colon Cancer Awareness Month at worksites, hospitals, and businesses.

Educational Presentations

• The District Cancer Councils sponsored 32 educational programs for over 1,300 individuals representing health care providers, social service agencies, businesses, and other community organizations.

Regional and Small Media

- KCP distributed a toolkit containing tips for reaching the media, sample press releases, articles for newspapers and newsletters, print advertisements, and public service announcements.
- Publicity, including a combination of 343 television and radio shows, public service
 announcements, and newsletter and newspaper articles, was secured. In addition, hundreds of
 organizations were provided e-mail messages and encouraged to share them with their networks
 and employees. Although challenging to track, it is estimated that at least 91,000 people were
 reached.

Special accomplishments

- KCP received funding from the Kentucky Cancer Consortium to develop and pilot a new worksite wellness program to encourage employees at businesses across the state to get screened for colon cancer. During the campaign, activities and messages focused on the importance of getting screened for colon cancer were shared with 18 worksites and over 6,000 employees.
- KCP in collaboration with the Kentucky Cancer Consortium expanded the "Pathfinder" to include a colon cancer screening directory for all 15 area development districts. The directory provides community-based information to help navigate and link people to colon cancer screening resources.
- KCP planned and coordinated 13 events in Lexington and Eastern Kentucky where over 2,361 people toured the Incredible Inflatable Colon and viewed the Faces of Colon Cancer Photographic Exhibit. Of the 852 people who filled out a short survey, 95% reported the exhibit increased their knowledge of colon cancer and 64% reported that they planned to talk with their health care provider about screening. The inflatable colon was also featured at seven events in Louisville and western Kentucky, including the State Fair for 10 days in August. Over 36,300 people toured the educational colon during this time and 1,618 completed a survey.

Appendix A: Statutes and Administrative Regulations

214.540 Definitions for KRS 214.540 to 214.544 -- Establishment and limitation of Colon Cancer Screening Program.

- (1) As used in KRS 214.540 to 214.544:
- (a) "Department" means the Department for Public Health in the Cabinet for Health and Family Services; and
- (b) "Program" means the Colon Cancer Screening Program.
- (2) The Colon Cancer Screening Program is hereby established for the purposes of:
- (a) Increasing colon cancer screening;
- (b) Reducing morbidity and mortality from colon cancer; and
- (c) Reducing the cost of treating colon cancer among citizens of the Commonwealth.
- (3) The provisions of KRS 214.540 to 214.544 shall be limited to the amount of appropriations to the department for the Colon Cancer Screening Program.

Effective: July 15, 2008

History: Created 2008 Ky. Acts ch.126, sec. 1, effective July 15, 2008.

214.542 Eligibility for Colon Cancer Screening Program -- Services provided -- Funding -- Affordability -- Data collection -- Administrative regulations.

- (1) The program shall provide colon cancer screening for uninsured individuals who are age fifty (50) to sixty-four (64) and other uninsured individuals determined to be at high risk for developing colon cancer.
- (2) Services provided under the program may be undertaken by private contract for services or operated by the department. The program may also provide referral services for the benefit of individuals for whom further examination or treatment is indicated by the colon cancer screening.
- (3) The department may adopt a schedule of income-based fees to be charged for colon cancer screening. The schedule adopted shall be such that the screening is affordable and accessible to the largest possible number of individuals throughout the Commonwealth.
- (4) The department may accept any grant or award of funds from federal or private sources for carrying out the provisions of this section.
- (5) The department shall establish a data collection system to document the number of individuals screened, the demographic characteristics of the individuals screened, and the types of colon cancer screening tests performed under the program.
- (6) The department shall promulgate administrative regulations to implement the provisions of this section.

Effective: July 15, 2010

History: Amended 2010 Ky. Acts ch.168, sec.1, effective July 15, 2010. -- Created 2008 Ky. Acts ch.126, sec.2, effective July 15, 2008.

Legislative Research Commission Note (7/15/2010)) 2010 Ky. Acts ch.168, sec.3 provides that the addition of subsection (3) of this statute in Section 1 of that Act shall be in memory of Richard "Butch" Stewart.

214.543 Kentucky Colon Cancer Screening Program fund.

- (1) (a) There is hereby created a restricted fund to be known as the Kentucky Colon Cancer Screening Program fund.
- (b) The fund shall be administered by the Finance and Administration Cabinet.
- (c) The fund shall include moneys appropriated by the General Assembly for the purpose of the Colon Cancer Screening Program and moneys collected under KRS 214.542.
- (2) Moneys in the fund shall be used by the department to administer KRS 214.540 to 214.544.
- (3) Notwithstanding KRS 45.229, any moneys remaining in the fund at the close of the fiscal year shall not lapse but shall be carried forward into the succeeding fiscal year to be used in accordance with subsection (2) of this section.
- (4) Interest earned on any moneys in the fund shall accrue to the fund.

(5) Moneys in the fund are hereby appropriated for the purposes set forth in KRS 214.540 to 214.544. **Effective:** July 15, 2010

History: Created 2010 Ky. Acts ch.168, sec.2, effective July 15, 2010.

Legislative Research Commission Note (7/15/2010). 2010 Ky. Acts ch.168, sec.3 provides that the creation of this statute in Section 2 of that Act shall be in memory of Richard "Butch" Stewart.

214.544 Colon Cancer Screening Advisory Committee -- Membership -- Duties -- Annual report -- Colon cancer screening, education, and outreach programs.

- (1) A Colon Cancer Screening Advisory Committee shall be established within the Kentucky Cancer Consortium. The advisory committee shall include:
- (a) One (1) appointee appointed by the Speaker of the House;
- (b) One (1) appointee appointed by the President of the Senate;
- (c) The deputy commissioner of the Department for Public Health;
- (d) Two (2) at-large members appointed by the Governor;
- (e) The director of health initiatives for the mid-south division of the American Cancer Society;
- (f) The director of the Kentucky Cancer Program at the University of Kentucky;
- (g) The director of the Kentucky Cancer Program at the University of Louisville;
- (h) The director of the Kentucky Cancer Registry;
- (i) The director of the Colon Cancer Prevention Project;
- (j) The chair of Kentucky African Americans Against Cancer; and
- (k) The director of the Kentucky Cancer Consortium.

Members of the advisory committee shall be appointed for a term of four (4) years.

- (2) (a) Members appointed under subsection (1)(a) to (d) of this section shall be appointed as follows:
- 1. Members shall be appointed for a term of four (4) years, except as provided in subparagraph 2. of this paragraph;
- 2. The initial appointments shall be for a period of two (2) years; thereafter, the appointments shall be for a term of four (4) years; and
- 3. Members shall not serve more than two (2) terms of four (4) years.
- (b) Members serving under subsection (1)(e) to (k) of this section shall serve by virtue of their positions and shall not be subject to term limits.
- (3) The chair of the advisory committee shall be elected from the membership of the advisory committee to serve for a two (2) year term. A member of the advisory committee may designate an alternate to attend meetings in his or her place.
- (4) The advisory committee may add members from other organizations as deemed appropriate.
- (5) The advisory committee shall provide recommendations for the overall implementation and conduct of the Colon Cancer Screening Program.
- (6) The advisory committee shall establish and provide oversight for a colon cancer screening public awareness campaign. The Cabinet for Health and Family Services shall contract with the Kentucky Cancer Consortium at the University of Kentucky to provide the required support. The amount of the contract shall not be included in the base budget of the university as used by the Council on Postsecondary Education in determining the funding formula for the university.
- (7) The Colon Cancer Screening Advisory Committee shall provide an annual report on implementation and outcomes from the Colon Cancer Screening Program and recommendations to the Legislative Research Commission, the Interim Joint Committee on Health and Welfare, the Interim Joint Committee on Appropriations and Revenue, the Governor, the secretary of the Cabinet for Health and Family Services, and the commissioner of the Department for Public Health.
- (8) The Kentucky Cancer Program, jointly administered by the University of Kentucky and the University of Louisville, shall establish a colon cancer screening, education, and outreach program in each of the state area development districts. The colon cancer screening, education, and outreach program shall focus on individuals who lack access to colon cancer screening. The Cabinet for Health and Family Services

shall contract with the University of Louisville and the University of Kentucky to provide the required support. The amount of the contract shall not be included in the base budgets of the universities as used by the Council on Postsecondary Education in determining the funding formula for the universities.

Effective: July 15, 2008

History: Created 2008 Ky. Acts ch. 126, sec. 3, effective July 15, 2008.

Legislative Research Commission Note (7/15/2008). There are two incorrect internal references in subsection (2) of this statute that have not been corrected in codification because they are drafting errors, not manifest clerical or typographical errors correctable by the Reviser of Statutes under KRS 7.136(1)(h). However, the reference in subsection (2)(a) to "subsection (1) of this section" should have been drafted as "subsection (1)(a), (c), and (d) of this section" since the deputy commissioner of the Department for Public Health referenced in subsection (1)(c) of this statute serves as an ex officio, not appointed, member of the advisory committee. Likewise, the reference in subsection (2)(b) of this statute to "subsection (1)(e) to (k) of this section" should have been drafted as "subsection (1)(c) and (e) to (k) of this section.

304.17A-257 Coverage under health benefit plan for colorectal cancer examinations and laboratory tests.

- (1) A health benefit plan issued or renewed on or after January 1, 2009, shall provide coverage for all colorectal cancer examinations and laboratory tests specified in current American Cancer Society guidelines for colorectal cancer screening of asymptomatic individuals as follows:
- (a) Coverage or benefits shall be provided for all colorectal screening examinations and tests that are administered at a frequency identified in the most recent version of the American Cancer Society guidelines for colorectal cancer screening; and
- (b) The covered individual shall be:
- 1. Fifty (50) years of age or older; or
- 2. Less than fifty (50) years of age and at high risk for colorectal cancer according to current colorectal cancer screening guidelines of the American Cancer Society.
- (2) Coverage under this section shall not be subject to a separate deductible or separate coinsurance but may be subject to the same deductible or coinsurance established for other laboratory testing under the health benefit plan.

Effective: July 15, 2008

History: Created 2008 Ky. Acts ch. 107, sec. 1, effective July 15, 2008

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State vs. National Comparisons, Death Rates, Males and Females:

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U.S. Colorectal Death Rates:

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Supporting Partners

American Cancer Society
Colon Cancer Prevention Project
Kentucky Cancer Consortium
Kentucky Cancer Foundation
Kentucky Cancer Program
Kentucky Cancer Registry
University of Kentucky Lucille Parker Markey Cancer Center
University of Louisville James Graham Brown Cancer Center